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(54) Title: **CASTANEA SATIVA** MILL. GENES CODIFYING FOR ALLENE OXIDE CYCLASE, CYSTATIN,  $\beta$ -1,3-GLUCANASE AND THAUMATIN-LIKE PROTEIN AND THEIR USE

(57) Abstract: This invention provides isolated and purified nucleotide sequences which are differentially expressed during chestnut infection with the pathogenic fungus *Phytophthora cinnamomi* Rands. The isolated genes can be inserted into expression cassettes and cloned in an expression vector which can be used to transform a host cell by selected transformation methods. Transgenic plants can be regenerated from transformed plant cells by *in vitro* culture techniques. The nucleotide sequences disclosed in this invention encode proteins which are described as having an effective action in plant resistance to pathogenic fungi. When used in sense orientation they can delay or even prevent plant infection, bringing important advantages for chestnut, cork-oak or other woody tree species' producers.

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